

Estimating the cascade of hepatitis C testing, care and treatment among people who inject drugs in Australia

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Introduction

The majority of hepatitis C virus (HCV) infections occur among people who inject drugs (PWID) with an estimated 10 million PWID exposed to HCV globally [1]. Despite safe and efficacious treatment and guidelines encouraging treatment among PWID, HCV treatment uptake is low among active PWID in most countries, including in Australia [2]. Universally accessible hepatitis C virus (HCV) direct-acting antiviral (DAA) therapies were made available in Australia on 1st March 2016.

This study utilises serological and self-reported data from a large national sample of PWID conducted in 2015 to 1) establish baseline estimates of the HCV cascade of care among PWID prior to introduction of DAAs, 2) develop a methodology to monitor changes in testing, care and treatment uptake among this subpopulation and 3) investigate opportunities for improving linkages to care among active PWID in Australia.

Methods

The Australian NSP Survey (ANSPS) is an annually repeated bio-behavioural surveillance system that consists of a brief self-reported questionnaire and provision of a capillary dried blood spot. In 2015, 2,304 NSP attendees from 47 NSP services nationally participated in the ANSPS. Respondents were asked to provide information about their self-reported hepatitis C status, their history of HCV testing (including confirmatory testing), specialist HCV care (including assessment using fibroscan) and whether they had ever received HCV treatment.

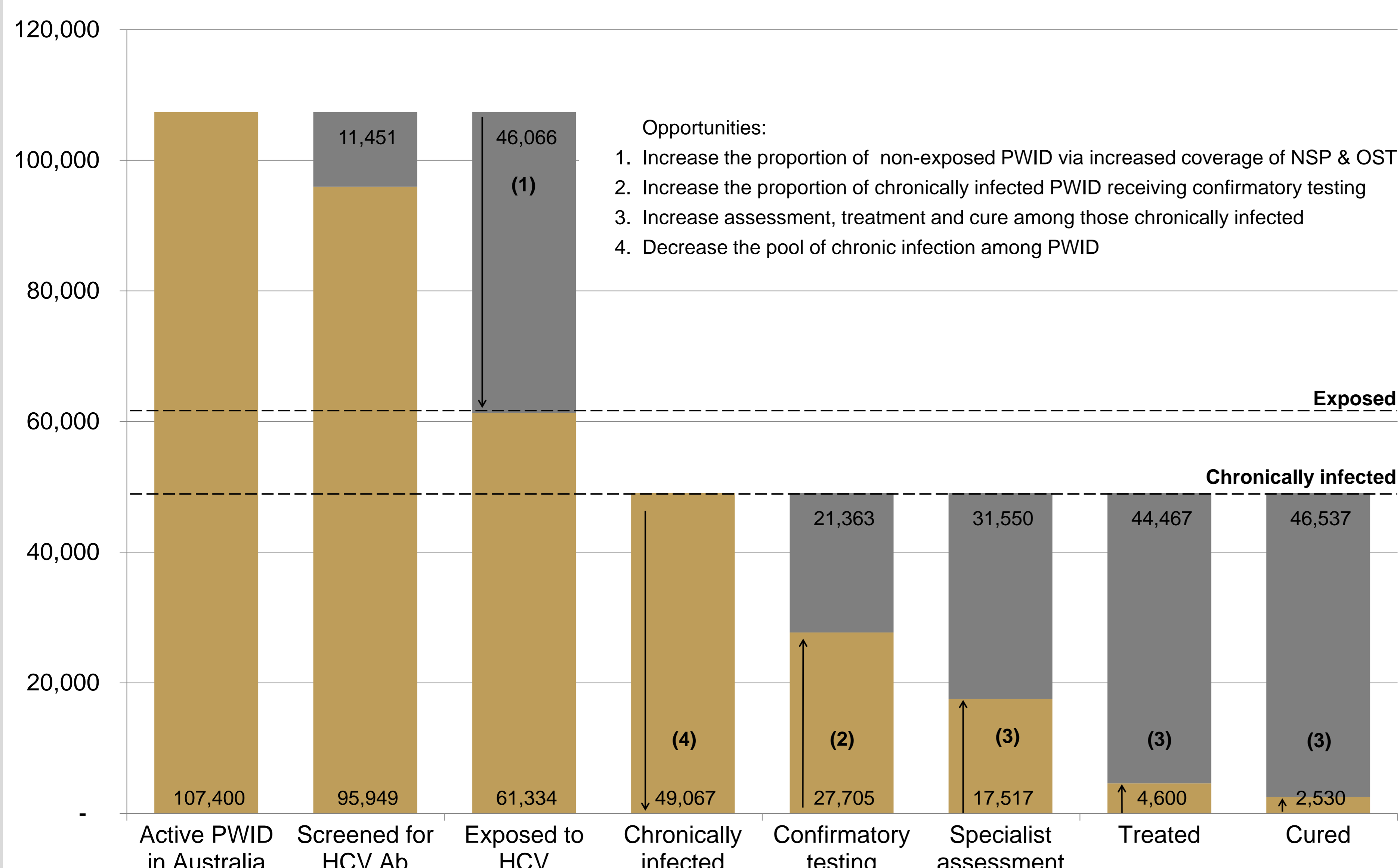
Serological testing: Antibodies to HCV were detected from dried blood spots using a modified third generation enzyme immunoassay (Monalisa Plus anti-HCV EIA version 2; Bio-Rad, Marnes-la-Coquette, France) and HCV RNA was detected and quantified using a modified Abbott RealTime™ (Illinois, United States) HCV RNA assay.

Results

In Australia, among an estimated 107,400 PWID [3] who have injected in the previous 12 months, 89% (n=95,949, range: 94,426-97,347) have received HCV antibody testing and 57% (n=61,334, range: 58,995-63,645) have been exposed to HCV. In 2015, 20% of ANSPS respondents had spontaneously cleared the virus (HCV antibody positive and HCV RNA negative serological results with no history of HCV treatment).

Among an estimated 49,067 (range: 47,626-50,478) PWID with chronic infection, 56% (n=27,705, range: 25,116-30,324) have had confirmatory testing, 36% (n=17,517, range: 15,941-19,222) have received specialist HCV assessment and 9% (n=4,600, range: 3,717-5,618) have been treated. After adjusting for treatment success of 55%, it is estimated that 46,537 (range: 45,582-47,388) PWID are currently living with chronic HCV infection in Australia.

Results



Conclusions

This study demonstrates high uptake of HCV antibody testing among active PWID, partially explained by the presence of a universal healthcare system providing HCV screening free of charge. Nevertheless, strategies are required to enhance testing for HCV RNA, linkage to care and HCV treatment among this population. The availability of government subsidised interferon-free HCV therapy for all adults (aged ≥18 years) with chronic HCV infection (irrespective of disease stage or recent drug use) in March 2016 has the potential to markedly improve the HCV care cascade among active PWID.

References

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